Digital's Process for the Management of Technical Standards and Related Documentation

DOCUMENT IDENTIFIER: A-DS-ELX0001-00-0000 Rev A, 12-Mar-1991

ABSTRACT: This document describes Digital's process for the management of Digital technical standards and related documents. It is an external version of DEC STD 001-0, Rev M (16-Jul-1990).

APPLICABILITY: These procedures are mandatory for the management of any document identified as a Digital standard. They are recommended guidelines for any other cross-product or cross-organizational Digital internal technical document.

© Digital Equipment Corporation. 1991. All rights reserved.

digital™

Digital's Process for the Management of Technical Standards and Related Documentation

DOCUMENT IDENTIFIER: A-DS-ELX0001-00-0000 Rev A, 12-Mar-1991

REVISION HISTORY: No previous revision exists.

Document Management Category:	Standards Administration Documentation (TDA)
Responsible Department:	Standards and Methods Control (SMC)
Responsible Person:	Eric Williams

Eric Williams - Standards Process Manager

CONTENTS

1 INTRODUCTION 1
1.1 PURPOSE 1
1.2 SCOPE 1

2 POLICY 1

3 REVIEW AND APPROVAL PROCESS 2

4 MAINTENANCE OF STANDARDS 4
4.1 REAFFIRMATION 4
4.2 REVISION 5

5 DISTRIBUTION AND REVIEW 6
5.1 DISTRIBUTION 6
5.2 REVIEW 6
5.3 LIMITED REVIEWS 6

6 ADVISORY COMMITTEE AND REVIEW GROUPS 7
6.1 STANDARD ADVISORY COMMITTEE 7
6.2 TECHNICAL REVIEW GROUP 7
6.3 GENERAL REVIEW GROUP 7

7 RESPONSIBILITIES 8
7.1 STANDARD OWNER 8
7.2 STANDARD ADVISORY COMMITTEE 8
7.3 TECHNICAL AND GENERAL REVIEW GROUPS 9
7.4 STANDARDS AND METHODS CONTROL (SMC) 9
7.5 STANDARDS PROCESS MANAGER 10

FIGURES

1 Digital Standard Review and Approval Process 3

1 INTRODUCTION

Digital provides policy statements, guidelines, standard procedures, and other technical information in the form of centrally registered, controlled documentation, to enable consistent application among organizations.

Digital documents that are required to be followed are classified as Digital standards. These documents define mandatory technical requirements for engineering, manufacturing, and support throughout Digital and are required to be managed and administered by appropriate organizations.

Other documents, which are more procedural in nature, or are guidelines or suggested methods to accomplish a purpose, are not identified as Digital standards. However, they may be related to or referenced by a Digital standard and controlled by the same organization.

1.1 PURPOSE

This document establishes Digital's policies for Digital standards and defines the essential management elements of the Digital Standards System.

The policies outlined in this document should also be used as guidelines for other controlled documents that are not classified as Digital standards.

The Standards Process facilitates participation in the development of internal standards by groups throughout Digital. It promotes worldwide internal communication of standards issues.

1.2 SCOPE

The Digital Standards System applies to internal technical standards. This system includes documentation of the technical aspects of cross-product processes, operating procedures, and methods that are required to implement and conform to such standards on a continuing basis.

The Digital Standards System does not include the documentation required to produce specific products. That information belongs in the Engineering Documentation System. It also does not include documentation of processes and procedures that are unique to a specific facility or plant.

2 POLICY

The need for a cross-organizational or cross-product document and the determination that it be in the form of a Digital standard, Digital guideline, or other type of controlled document is a Digital business decision. As a result, the purpose of every document should be to:

DECREASE THE TOTAL COST TO DESIGN, PRODUCE, AND SELL PRODUCTS, AND/OR INCREASE TOTAL REVENUES FOR DIGITAL AS A WHOLE, CONSISTENT WITH DIGITAL'S BUSINESS STRATEGIES AND REGULATIONS AND LAWS OF THE COUNTRIES IN WHICH DIGITAL HAS CHOSEN TO DO BUSINESS.

Each Digital standard shall have one person identified as the standard owner.

The process for review and approval of a proposed Digital standard and the update, change, reaffirmation, or inactivation of a Digital standard shall be consistent with the process defined in this standard. It is necessary that a Standards Process Manager be identified and the specific process attributes be documented. The Standards Process Manager is responsible for communicating this process to all owners of Digital standards.

Other processes that meet the intent of the Standards Process may be followed, subject to the approval of the Standards Process Manager.

3 REVIEW AND APPROVAL PROCESS

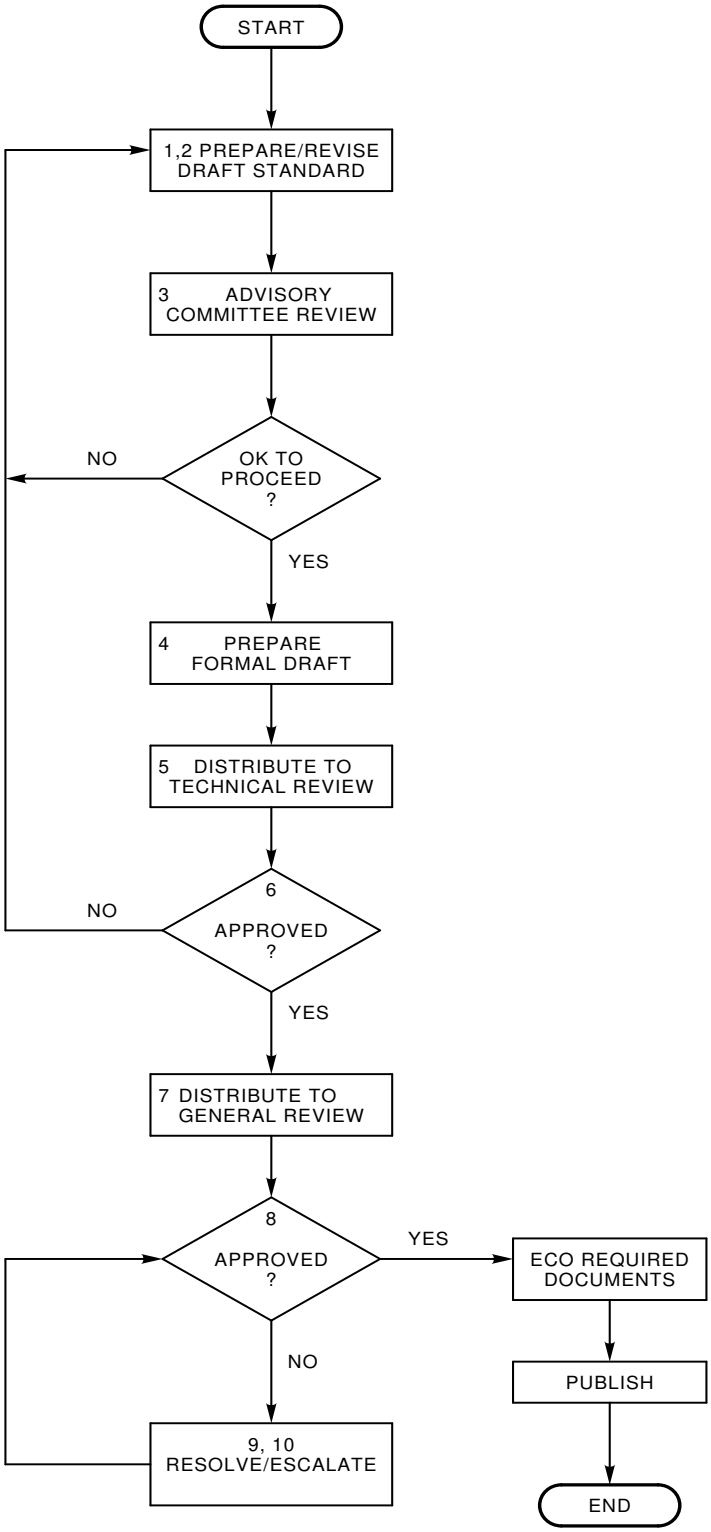
The general process for developing, reviewing, and approving a Digital standard is defined in Figure 1 and in the following paragraphs. The adoption of all appropriate external standards for internal use shall follow the review and approval process. Heading 7 defines specific responsibilities of individuals and committees within this process.

This process assumes the standard owner is working with Standards and Methods Control (SMC). An alternative process may be substituted, subject to the approval of the Standards Process Manager.

The process includes the following steps.

1. A standard proposer consults with the Standards Process Manager to determine if a standard is needed and who the owner shall be.
2. If a standard is needed, a draft standard is prepared. SMC is available to assist in the preparation of the draft.
3. The standard owner is responsible for forming the Standard Advisory Committee to provide assistance in the development and maintenance of the standard. The standard owner reviews the draft standard with the Standard Advisory Committee.
4. The standard owner contacts SMC and delivers the draft standard.
   a. SMC assigns a standard number.
   b. SMC reviews the format and suggests modifications and, if necessary, recommends edits to the draft for readability, and defines the necessary control information. All changes are performed in consultation with the standard owner.
   c. The standard owner plans the review and approval process in consultation with SMC and the Standards Process Manager.
   d. SMC provides guidance for consistent conformance to the security standards.
5. The SMC review coordinator distributes the draft standard for a technical review to individuals working in the subject area. This review by the Technical Review Group can be incorporated as part of the General Review at the discretion of the standard owner. Comments are returned to the SMC review coordinator; SMC ensures that the standard owner receives a copy of all comments. See subhead 6.2 for more information on the Technical Review Group.

Figure 1: Digital Standard Review and Approval Process



6. The standard owner, using the Standard Advisory Committee, determines the disposition of all comments received. The standard owner addresses each disapproving recommendation, makes a decision on it, and notifies the person recommending disapproval. The standard owner provides reviewers with a summary of the Technical Review pass, according to subhead 5.2.
7. The updated proposed standard is distributed to the General Review Group for review. Comments are returned to the SMC review coordinator; SMC ensures that the standard owner receives a copy of all comments. See subhead 6.3 for more information on the General Review Group.
8. The standard owner, using the Standard Advisory Committee, determines the disposition of all comments received. The standard owner addresses each disapproving recommendation, makes a decision on it, and notifies the person recommending disapproval. The standard owner provides reviewers with a summary of the General Review, according to subhead 5.2.

NOTE

When significant changes result from a review, the standard owner and/or the Standards Process Manager may determine that additional reviews are required.

9. If the standard owner cannot resolve an issue with a reviewer, the standard owner notifies the Standards Process Manager. The Standards Process Manager calls and chairs a meeting of the standard owner, members of the Standard Advisory Committee, and reviewers of the document to resolve the issue.
10. If the issue remains unresolved, it is taken by the Standards Process Manager to the appropriate senior management for resolution.

4 MAINTENANCE OF STANDARDS

The process for maintaining an existing standard follows.

4.1 REAFFIRMATION

The standard owner is responsible for revising the standard, as required, to keep it current. To ensure this occurs, a standard owner is required to provide an expiration date, subject to the approval of the Standards Process Manager.

The standard owner can take any of the following actions as a result of reaffirmation.

a. Indicate that no change is required, and establish a new expiration date.
b. Indicate that only clerical changes are required to update names, telephone numbers, and so forth, with no change to the technical content of the standard, and authorize an Engineering Change Order (ECO) to the standard with a new expiration date.
c. Indicate that a revision to technical content is required. It may be necessary to establish an expiration date extension consistent with the targeted revision completion.

d. Indicate that the document is inaccurate and out of date, and that it should be inactivated. The decision to inactivate a document is made by the standard owner with the approval of the General Review Group. This is done in accordance with the review process described under subhead 5.2.

e. Indicate that the document is no longer applicable to new designs, and that it should be reclassified as historical.

The results of the reaffirmation by the standard owner shall be forwarded to SMC. SMC shall forward the information to the Standards Process Manager.

If a standard owner leaves his or her position and is no longer the logical owner for the standard, the Standards Process Manager and the individual's former manager shall assign a new owner for the standard. This assignment shall be made in consultation with the Advisory Committee for that standard.

If a new owner cannot be identified from the original group, the Standards Process Manager shall negotiate with the appropriate groups to determine a new owner.

The new standard owner is responsible for reviewing the standard to ensure the document is revised as necessary and that the expiration date is not passed.

4.2 REVISION

When a revision is needed, the standard owner shall notify SMC and create the preliminary revised standard. The standard owner reviews the document with the Standard Advisory Committee and then submits it to SMC. The process described in heading 3, steps 4 through 10, is followed from that point on. A revision to a standard always requires an ECO signed by the standard owner and the Standards Process Manager. This is done after the changes have been reviewed and approved by the same process that is used for reviewing and approving a new standard. SMC shall prepare the paperwork and obtain necessary signatures for any required ECOs.

Individuals other than the standard owner may initiate a change to the standard. The standard owner is required to participate in all reviews and the resolution of issues.

5 DISTRIBUTION AND REVIEW

Descriptions of the distribution and review processes follow.

5.1 DISTRIBUTION

Electronic mail shall be used where possible to expedite the review process. Hard copies for review will be used only when electronic mail distribution is inappropriate.

All standards in General Review are listed in SMC's VTX application.

5.2 REVIEW

Reviewers shall return their comments to the SMC review coordinator on or before the required return date indicated on the transmittal memo. An electronic response is preferred, to expedite the process. Responses received after the noted date need not be considered for the current review pass, unless the standard owner has agreed beforehand to wait until a specified date for a particular response. The standard owner is not expected to delay the process by waiting for review comments. The SMC review coordinator shall ensure that the standard owner receives a copy of all review comments.

If a reviewer recommends disapproval, then the reviewer shall identify the specific wording, paragraphs, and so forth that form the basis for the disapproval. The reviewer shall then provide recommendations that would make the standard acceptable.

The standard owner shall provide reviewers with a summary of the review comments, identifying the number of respondents, the number of recommended approvals with and without comments, and the number of recommended disapprovals. This summary shall provide a synopsis of the recommended disapprovals and the owner's disposition of these disapprovals. It shall also include a list of those responding to the review. A copy of this summary is required to be on record with SMC. It is recommended that the standard owner use SMC to administer the review process.

The standard owner shall respond to recommendations for disapprovals either by electronic mail or through a meeting with the disapproving person(s). The individual recommending disapproval may at that time recommend approval based on the intended action of the owner or continue to disapprove and request the issue be escalated.

5.3 LIMITED REVIEWS

When only a specific area of an existing standard has been revised, the standard owner may choose to initiate a limited review, focusing only on that change. The purpose of this limited review is to expedite turnaround time for the approval of the revision. This review would follow the same processes and use the same groups as the Technical and General Reviews. However, reviewers would respond by recommending approval or disapproval of the change and would not be required to review the entire document. Comments received outside the scope of the change, during this limited review, would be considered at the discretion of the standard owner.

6 ADVISORY COMMITTEE AND REVIEW GROUPS

The function and composition of the advisory committee and review groups follow.

6.1 STANDARD ADVISORY COMMITTEE

Each standard owner shall form and maintain an Advisory Committee that will assist in the development and maintenance of the standard.

The standard owner shall ensure that minutes or results of meetings or conferences are published appropriately and are placed on record with the Standards Process Manager.

The standard owner shall be the owner of the Advisory Committee list and is required to approve any additions to this list. The list shall be kept on file with SMC.

6.2 TECHNICAL REVIEW GROUP

Prior to the standard going for a general review, a standard owner may choose to have the draft standard distributed for a technical review by individuals working in the subject area.

The Technical Review Group is used when the standard owner needs technical input to the standard from a group larger than the Standard Advisory Committee. The purpose is to address any technical issues in the standard prior to the general review.

The standard owner shall be the owner of the Technical Review Group list and is required to approve any additions to this list. The Technical Review Group shall include members of the Advisory Committee. The Technical Review Group list shall be kept on file with SMC.

6.3 GENERAL REVIEW GROUP

A General Review Group shall be established for each standard by the standard owner with consultation from the Standards Process Manager.

The General Review Group shall consist of the following five categories of reviewers.

a. Reviewers who are affected by the content of the standard

b. Representatives of groups listed as having responsibilities in the standard

c. Members of the Technical Review Group

d. Owners of other Digital documents that are affected by the standard and owners of all Digital documents that are referenced within the standard to be reviewed

e. Additional reviewers who the standard owner and Standards Process Manager believe can add value to the review

In addition, representatives of the following organizations should be included, if their function is relevant to the subject: Quality Control, Customer Services, Sales, Marketing, Manufacturing, Country Requirements Advisors, the Law Department, and Security.

Any Digital employee can request to be added to the General Review Group.

NOTE

Certain standards, such as architecture standards, standards describing high-level policies, and standards dealing with sensitive, proprietary information, may have

restricted general review lists. The creation of restricted general review lists is only done with the approval of the Standards Process Manager.

7 RESPONSIBILITIES

The following groups and individuals have primary responsibilities defined in the Digital Standards System.

7.1 STANDARD OWNER

The standard owner is responsible for the following.

a. Develop the content of the standard and address all comments and issues during review and approval of that standard.

b. Ensure that the standard is maintained and updated. This includes establishing a realistic expiration date for the standard and ensuring that reaffirmation occurs before that date.

c. Provide consultation resources for users who require assistance in implementing a standard. If more than nominal consultation is required, the standard owner may require funding from the requester.

d. Provide resolution of all technical issues relating to the standard.

e. Form and maintain a standard Advisory Committee to provide assistance in the development and maintenance of the standard.

f. Classify the standard, in conformance with Digital's security standards.

g. Determine if the standard, or portions thereof, are to be made available to external customers or vendors and, if so, establish procedures for allowing this to occur. The security classification, which defines how the standard will be distributed, must be clearly indicated on the front page of the standard. If the standard is not to be released to vendors or customers, appropriate releasable versions of the document may need to be generated.

h. Authorize persons to develop revisions to the standard, subject to the approval of the standard owner.

7.2 STANDARD ADVISORY COMMITTEE

Members of a standard Advisory Committee are responsible for the following.

a. Keep well informed about the standard's content, trends, and impacts.

b. Provide assistance to the standard owner in the development and maintenance of the standard, review all proposed changes, and comment promptly.

7.3 TECHNICAL AND GENERAL REVIEW GROUPS

Members of the Technical and General Review Groups for a standard are responsible for the following.

a. Review the proposed standard, or changes to the standard, and send comments promptly to the SMC review coordinator.

b. Ensure that, if their organization has responsibilities listed in the document, the appropriate people within the organization review the document.

c. Identify other persons or organizations that should participate in the review.

7.4 STANDARDS AND METHODS CONTROL (SMC)

Standards and Methods Control is responsible for the following.

a. Provide a central registry for Digital standard number assignment.

b. Provide resources for standard owners requiring writing assistance, consultation in format and style, and editing for readability.

c. Provide minimum documentation control requirements for owners using their own resources to prepare the standard.

d. Provide the resource for publication and distribution of standards.

e. Support standard owners and the Standards Process Manager in defining the required review and approval processes for a standard.

f. Provide a standards review coordinator as the focus for obtaining and distributing review copies, review comments, and summaries of review comments when needed.

g. Arrange for appropriate exposure of Digital standards using internal newsletters and related publications in an effort to notify Digital personnel of the existence and availability of these standards.

h. Provide records retention of Digital standards for the Corporation.

i. Mark the standard with proper security classification, in conformance with Digital security standards.

j. Provide guidance for consistent documentation format and style.

k. Maintain the status of standards on videotext and publish indexes and directories, as needed.

7.5 STANDARDS PROCESS MANAGER

The Standards Process Manager is responsible for the following.

a. Provide process and procedural consultation for a person proposing a new standard.

b. Call and chair a meeting of the standard owner, standard Advisory Committee members, and reviewers to facilitate resolution if the standard owner cannot resolve an issue with a reviewer.

c. Call and chair a meeting of the standard owner, standard Advisory Committee members, and reviewers to determine an action plan to expedite the review process if a standard has been in either a technical or general review for 180 days. This meeting shall take place only after consultation with the standard owner.

d. Escalate any unresolved issues to the appropriate senior management for resolution.

e. Generate clear policies and formal processes that allow standard issues to be resolved in a responsible manner.

f. Ensure that issues are communicated openly and promptly and that standards in review are reported on regularly.

g. Communicate the Standards Process to all standard owners.